

HCAPLUS REG SEARCH

LEE 09/413,381

DESI AVAILABLE COPY

=> d his

(FILE 'HOME' ENTERED AT 17:59:34 ON 26 JUL 2000)  
FILE 'HCAPLUS' ENTERED AT 17:59:42 ON 26 JUL 2000  
31 S SEEBERGER P2/AU  
9 S PLANTE O2/AU  
8 S L1 AND L2  
SELECT RN L3 1-8  
FILE 'REGISTRY' ENTERED AT 18:00:43 ON 26 JUL 2000  
82 S E1-82  
FILE 'HCAPLUS' ENTERED AT 18:01:05 ON 26 JUL 2000  
4 S L3 AND L4 4 cites w/ cdds  
4 S L3 NOT L5 4 cites no cdds  
FILE 'REGISTRY' ENTERED AT 18:06:53 ON 26 JUL 2000

inventor search

point search  
52 L3388 AND L3874  
50 S L7 AND L8  
SCREEN 1838 AND 2016  
STR  
L7

sub set search  
42366 S L11 SSS SAM SUB=L10  
50 S L11 SSS SAM SUB=L10  
STR L7  
SAVE L10 LEE381P/A

FILE 'HCAPLUS' ENTERED AT 18:18:04 ON 26 JUL 2000

8149 S L13 8149 cites  
217941 S LIBRARY OR COMBINATOR? OR (SOLID(W) (PHASE OR SUPPORT OR STATE  
26 S L14(L) L15  
228 S L14(L) GLYCOSYL? 24 cites related to combinator, etc  
417 S GLYCOSYL? (4A) SUBSTRATE  
5 S L19(L) L14  
5 S L20 NOT L3  
5 S L23 NOT L22  
66 S L14(L) (DONAT? OR DON###)  
11758 S PHOSPH? (4A) TRANSFER  
4388 S PHOSPH? (4A) (DONAT? OR DON###)  
361 S L14 AND (L25 OR L26 OR L27)  
106 S L14(L) (L25 OR L26 OR L27)  
24 S L29(L) GLYCOSY?  
50708 S TRIFLATE OR SULFONATE  
0 S L30 AND L31  
0 S L29 AND L31  
0 S L25 AND L31  
16451 S LEWIS ACID  
0 S L35 AND L30  
0 S L28 AND L36  
0 S L25 AND (L31 OR L35)  
24 S L30 NOT L23  
23 S L33 NOT L34

23 5 cites related to glycosylation  
FILE 'REGISTRY' ENTERED AT 18:38:56 ON 26 JUL 2000  
STR L7  
50 S L41  
STR L41  
16 S L43  
5539 S L43-FUL  
SAVE L45 LEE381P2/A  
SAVE L13 LEE381S/A  
FILE 'HCAPLUS' ENTERED AT 18:42:42 ON 26 JUL 2000  
6272 S L45  
58 S L46 AND L14  
783 S L14(L) SPN/RL



starting material

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LEE 09/413,381

30 S L48 AND L45  
4 S L49 AND (OXID? OR PERSULFAT? OR TOXIRAN? OR EPOXID? OR CARBO  
L50  
L49  
L51  
L52  
26 S L49 NOT L51  
L53  
L54  
L55  
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L100

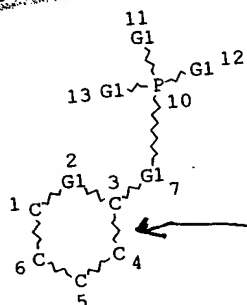
4 citos  
23 citos  
prop of



SEARCHED BY SUSAN HANLEY 305-4053

> d' que 144  
L7 STR

parent STR

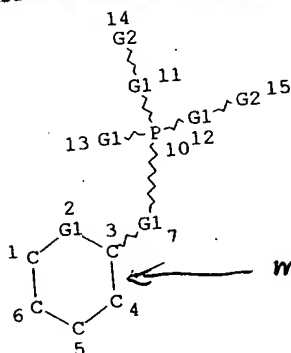


← any type of bonding

VAR G1=O/S/N  
NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RSPEC I  
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE  
L8 SCR 1838 AND 2016  
L10 5213 SEA FILE=REGISTRY SSS FUL L7 AND L8  
L11 STR



← must be single exact bonding

VAR G1=O/S/N  
VAR G2=H/AK/CY  
NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

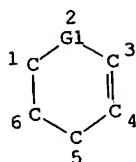
GRAPH ATTRIBUTES:  
RSPEC I  
NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE  
L13 4236 SEA FILE=REGISTRY SUB=L10 SSS FUL L11  
L14 8149 SEA FILE=HCAPLUS ABB=ON PLU=ON L13

=> d'que 146

L43 STR

structure for starting material



VAR G1=O/S/N  
 NODE ATTRIBUTES:  
 CONNECT IS E2 RC AT 3  
 CONNECT IS E2 RC AT 4  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RSPEC I  
 NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE  
 L45 5539 SEA FILE=REGISTRY SSS FUL L43  
 L46 6272 SEA FILE=HCAPLUS ABB=ON PLU=ON L45

Inventors  
work

=&gt; d bib abs hitstr 15 1

LS ANSWER#1 OF 4 HCAPLUS COPYRIGHT 2000 ACS

AN 2000:241242 HCAPLUS

DN 132:251369

TI Combinatorial synthesis of oligosaccharide phosphates via glycosidation reaction

IN Seeberger, Peter H.; Plante, Obadiah J.

PA Massachusetts Institute of Technology, USA

SO PCT Int. Appl., 92 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000020428	A2	20000413	WO 1999-US23292	19991006

W: CA, JP

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE

PRAI US 1998-103291 19981006

OS MARPAT 132:251369

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB One aspect of the present invention relates to differentially protected glycosyl phosphates in prepn. of oligosaccharide phosphates I wherein X represents O, NR1, or S; Y represents independently for each occurrence O, NR1, or S; Z represents independently for each occurrence O, NR1, or S; R is selected, independently for each occurrence, from the group consisting of H, alkyl, heteroalkyl, aryl, aralkyl, heteroaryl, and heteroaralkyl; R1 is selected, independently for each occurrence, from the group consisting of H, alkyl, heteroalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, acyl, and sulfonyl; R2, R3, and R4 are independently selected from the group consisting of R, OR1, SR1, amine, OSO3H, OPO3H2; R5 is selected from the group consisting of R, (CR2)nOR1, (CR2)nSR1; and n is an integer selected from the range 0 to 10 inclusive. Another aspect of the present invention relates to the prepn. of glycosyl phosphates from glycal precursors. In another aspect of the present invention, glycosyl phosphates are used as glycosyl donors in glycosylation reactions. Thus, trisaccharide II was prepd. via glycosidation reaction with glycal.

IT 226919-62-6P 226919-63-7P 226919-64-8P  
226919-65-9P 226919-67-1P 226919-68-2P  
226919-72-8P 226919-78-4P 226919-79-5P  
226919-81-9P 226919-83-1P 226919-84-2P

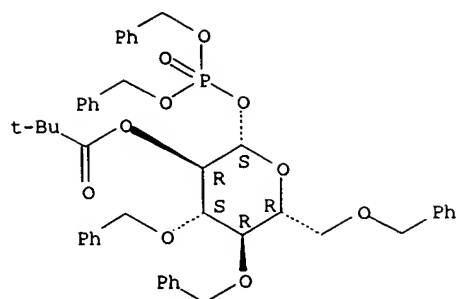
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(combinatorial synthesis of oligosaccharide phosphates via glycosidation reaction)

RN 226919-62-6 HCAPLUS

CN .beta.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-[bis(phenylmethyl) phosphate] 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

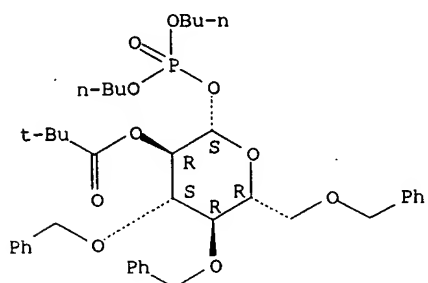
Absolute stereochemistry. Rotation (+).



RN 226919-63-7 HCAPLUS

CN .beta.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

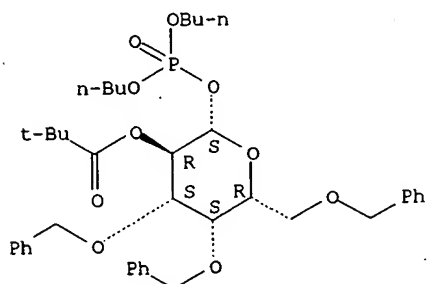
Absolute stereochemistry. Rotation (-).



RN 226919-64-8 HCAPLUS

CN .beta.-D-Galactopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

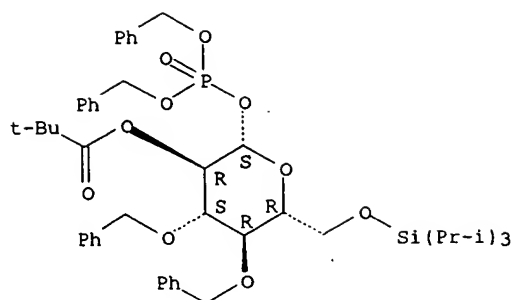
Absolute stereochemistry. Rotation (+).



RN 226919-65-9 HCAPLUS

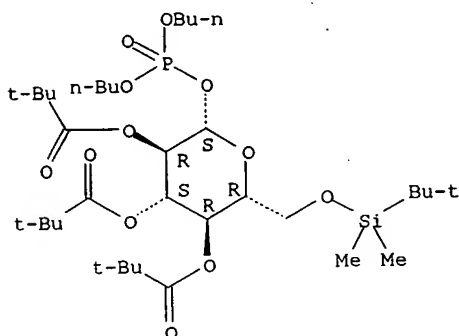
CN .beta.-D-Glucopyranose, 3,4-bis-O-(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-, 1-[bis(phenylmethyl) phosphate] 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



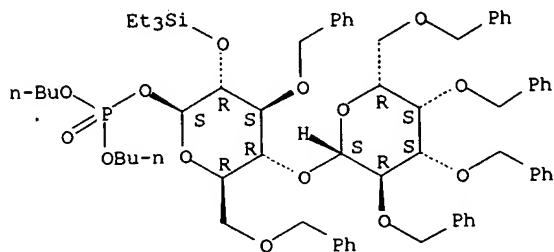
RN 226919-67-1 HCAPLUS  
 CN .beta.-D-Glucopyranose, 6-O-[(1,1-dimethylethyl)dimethylsilyl]-,  
 1-(dibutyl phosphate) 2,3,4-tris(2,2-dimethylpropanoate) (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry. Rotation (+).



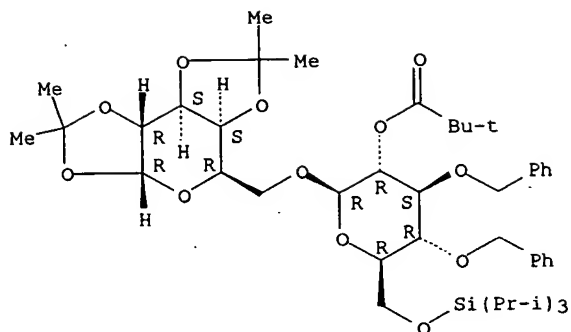
RN 226919-68-2 HCAPLUS  
 CN .beta.-D-Glucopyranose, 3,6-bis-O-(phenylmethyl)-4-O-[2,3,4,6-tetrakis-O-  
 (phenylmethyl)-.beta.-D-galactopyranosyl]-2-O-(triethylsilyl)-, dibutyl  
 phosphate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



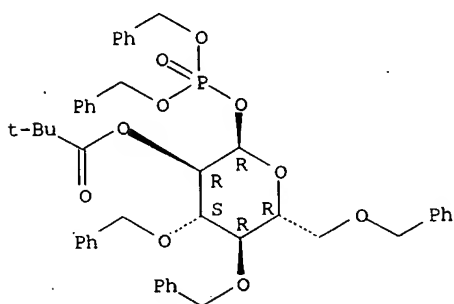
RN 226919-72-8 HCAPLUS  
 CN .alpha.-D-Galactopyranose, 6-O-[2-O-(2,2-dimethyl-1-oxopropyl)-3,4-bis-O-  
 (phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-.beta.-D-glucopyranosyl]-  
 1,2:3,4-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



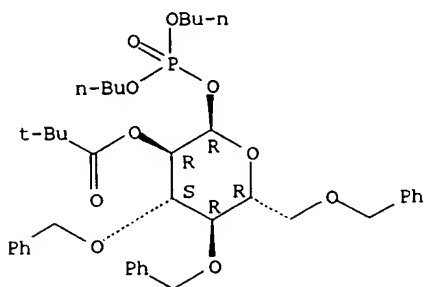
RN 226919-78-4 HCAPLUS  
 CN .alpha.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-,  
 1-[bis(phenylmethyl) phosphate] 2-(2,2-dimethylpropanoate) (9CI) (CA  
 INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 226919-79-5 HCAPLUS  
 CN .alpha.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl  
 phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

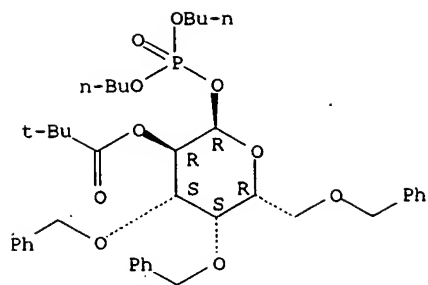
Absolute stereochemistry. Rotation (+).



RN 226919-81-9 HCAPLUS  
 CN .alpha.-D-Galactopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl  
 phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

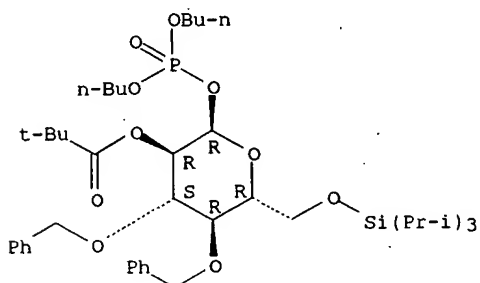




RN 226919-83-1 HCAPLUS

CN .alpha.-D-Glucopyranose, 3,4-bis-O-(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

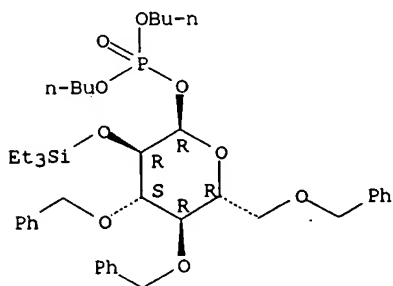
Absolute stereochemistry. Rotation (+).



RN 226919-84-2 HCAPLUS

CN .alpha.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-2-O-(triethylsilyl)-, dibutyl phosphate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 75-08-1, Thioethanol 582-52-5 2465-65-8

4064-06-6 33494-81-4 40246-30-8

55628-54-1 145852-76-2 226919-69-3

226919-70-6 262436-84-0

RL: RCT (Reactant)

(combinatorial synthesis of oligosaccharide phosphates via glycosidation reaction)

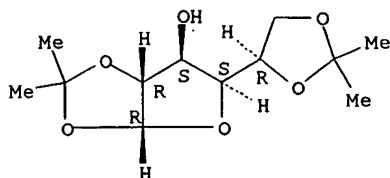
RN 75-08-1 HCAPLUS

CN Ethanethiol (8CI, 9CI) (CA INDEX NAME)

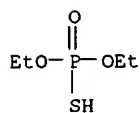
H<sub>3</sub>C-CH<sub>2</sub>-SH

RN 582-52-5 HCAPLUS  
 CN .alpha.-D-Glucofuranose, 1,2:5,6-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

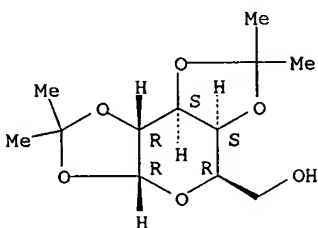


RN 2465-65-8 HCAPLUS  
 CN Phosphorothioic acid, O,O-diethyl ester (8CI, 9CI) (CA INDEX NAME)

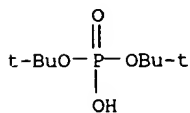


RN 4064-06-6 HCAPLUS  
 CN .alpha.-D-Galactopyranose, 1,2:3,4-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

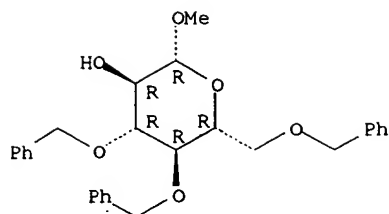


RN 33494-81-4 HCAPLUS  
 CN Phosphoric acid, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



RN 40246-30-8 HCAPLUS  
 CN .beta.-D-Glucopyranoside, methyl 3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

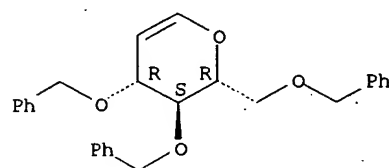
Absolute stereochemistry.



RN 55628-54-1 HCAPLUS

CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3,4,6-tris-O-(phenylmethyl)-  
(9CI) (CA INDEX NAME)

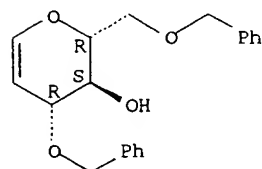
Absolute stereochemistry. Rotation (-).



RN 145852-76-2 HCAPLUS

CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3,6-bis-O-(phenylmethyl)-  
(9CI) (CA INDEX NAME)

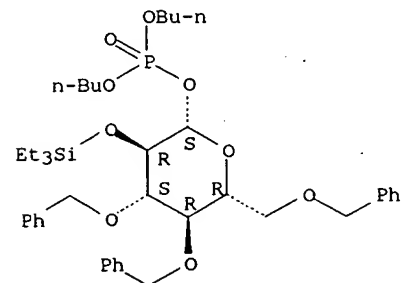
Absolute stereochemistry.



RN 226919-69-3 HCAPLUS

CN .beta.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-2-O-(triethylsilyl)-,  
dibutyl phosphate (9CI) (CA INDEX NAME)

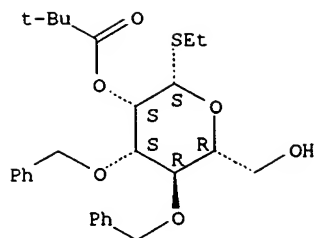
Absolute stereochemistry. Rotation (-).



RN 226919-70-6 HCAPLUS

CN .beta.-D-Mannopyranoside, ethyl 3,4-bis-O-(phenylmethyl)-1-thio-,  
2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

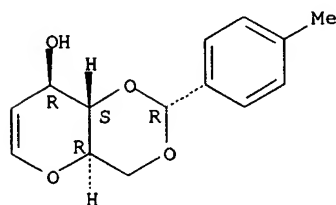
Absolute stereochemistry.



RN 262436-84-0 HCAPLUS

CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-4,6-O-[(R)-(4-methylphenyl)methylene]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



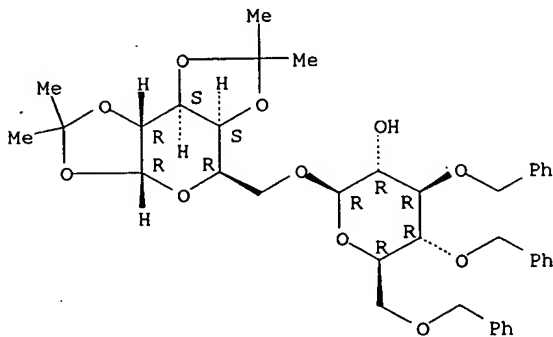
IT 40246-33-1P 201210-64-2P 219122-26-6P  
 219122-30-2P 226919-66-0P 226919-71-7P  
 226919-73-9P 226919-76-2P 262590-82-9P  
 262590-83-0P 262590-84-1P 262590-85-2P  
 262590-86-3P 262590-87-4P 262590-88-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (combinatorial synthesis of oligosaccharide phosphates via  
 glycosidation reaction)

RN 40246-33-1 HCAPLUS

CN .alpha.-D-Galactopyranose, 1,2:3,4-bis-O-(1-methylethylidene)-6-O-[3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl]- (9CI) (CA INDEX NAME)

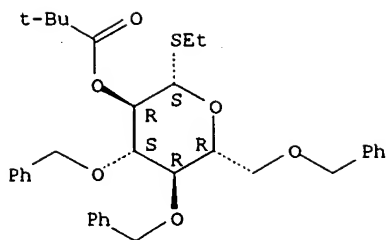
Absolute stereochemistry. Rotation (-).



RN 201210-64-2 HCAPLUS

CN .beta.-D-Glucopyranoside, ethyl 3,4,6-tris-O-(phenylmethyl)-1-thio-, 2,2-dimethylpropanoate (9CI) (CA INDEX NAME)

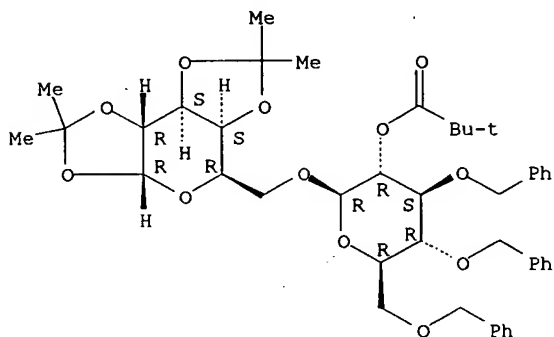
Absolute stereochemistry.



RN 219122-26-6 HCAPLUS

CN .alpha.-D-Galactopyranose, 6-O-[2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl]-1,2:3,4-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

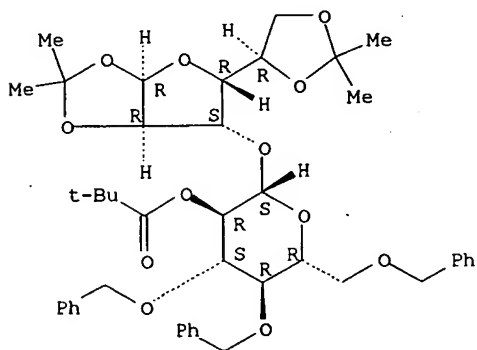
Absolute stereochemistry. Rotation (-).



RN 219122-30-2 HCAPLUS

CN .alpha.-D-Glucopyranose, 3-O-[2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl]-1,2:5,6-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

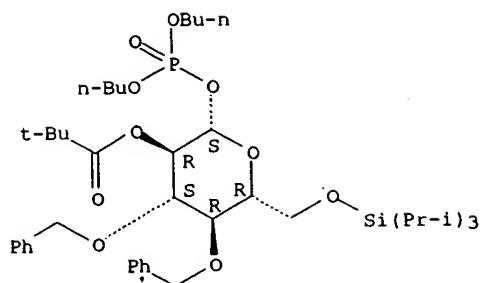
Absolute stereochemistry. Rotation (-).



RN 226919-66-0 HCAPLUS

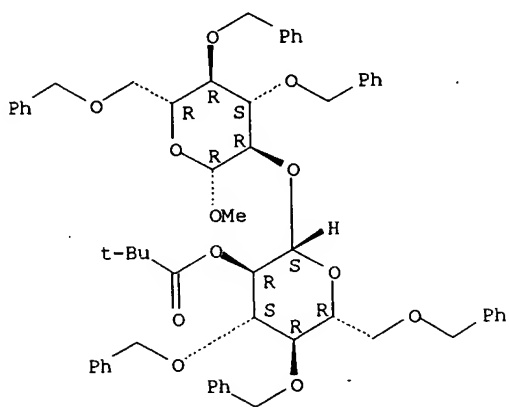
CN .beta.-D-Glucopyranose, 3,4-bis-O-(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



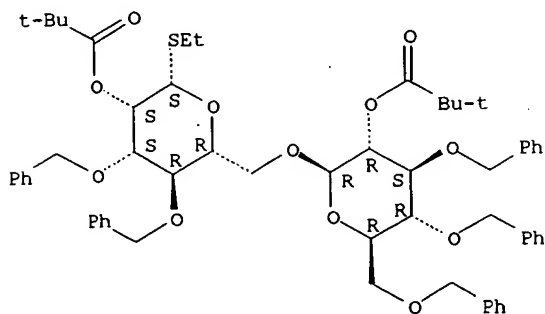
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Absolute stereochemistry. Rotation (-).



RN 226919-73-9 HCAPLUS  
 CN .beta.-D-Mannopyranoside, ethyl 6-O-[2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl]-3,4-bis-O-(phenylmethyl)-1-thio-, 2,2-dimethylpropanoate (9CI) (CA INDEX NAME)

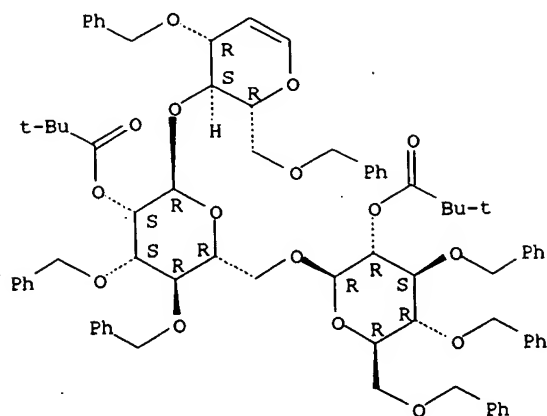
Absolute stereochemistry. Rotation (-).



RN 226919-76-2 HCAPLUS  
 CN D-arabino-Hex-1-enitol, O-2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl-(1.fwdarw.6)-O-2-O-(2,2-dimethyl-1-oxopropyl)-3,4-bis-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.4)-1,5-anhydro-2-deoxy-3,6-bis-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

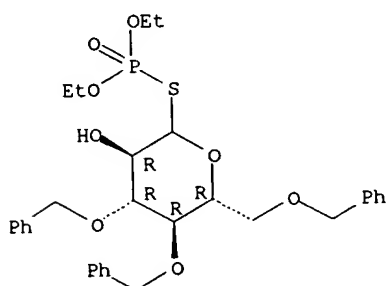
SEARCHED BY SUSAN HANLEY 305-4053

Absolute stereochemistry. Rotation (-).



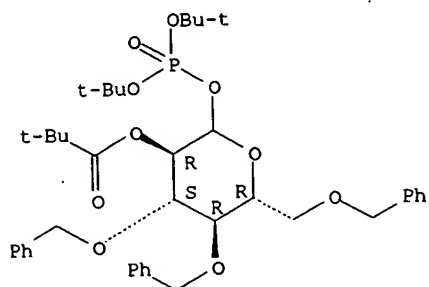
RN 262590-82-9 HCAPLUS  
CN D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-1-thio-, 1-(diethyl phosphate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



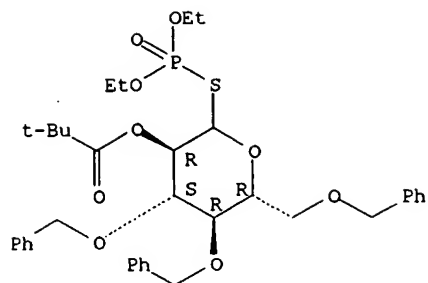
RN 262590-83-0 HCAPLUS  
CN D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-[bis(1,1-dimethylethyl) phosphate] 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 262590-84-1 HCAPLUS  
CN D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-1-thio-, 1-(diethyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

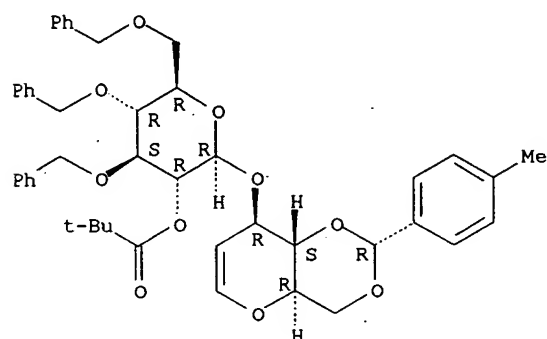
Absolute stereochemistry.



RN 262590-85-2 HCAPLUS

CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3-O-[2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl]-4,6-O-[(R)-(4-methylphenyl)methylene]- (9CI) (CA INDEX NAME)

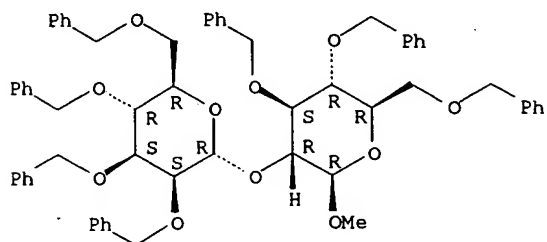
Absolute stereochemistry.



RN 262590-86-3 HCAPLUS

CN .beta.-D-Glucopyranoside, methyl 3,4,6-tris-O-(phenylmethyl)-2-O-[2,3,4,6-tetrakis-O-(phenylmethyl)-.alpha.-D-mannopyranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



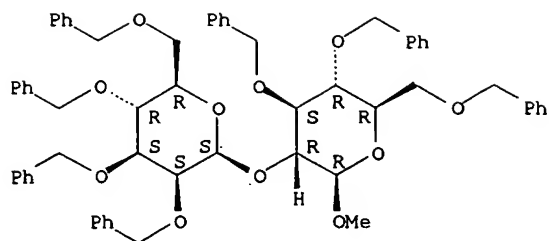
RN 262590-87-4 HCAPLUS

CN .beta.-D-Glucopyranoside, methyl 3,4,6-tris-O-(phenylmethyl)-2-O-[2,3,4,6-tetrakis-O-(phenylmethyl)-.beta.-D-mannopyranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



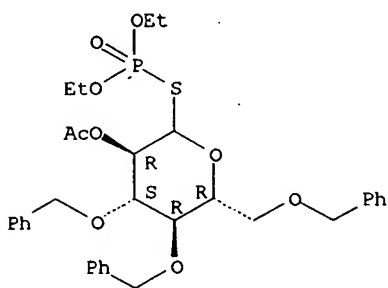
LEE 09/413,381



RN 262590-88-5 HCAPLUS

CN D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-1-thio-, 2-acetate 1-(diethyl phosphate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

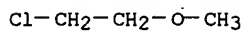


=&gt; d bib abs hitstr 15 2

L5 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2000 ACS  
 AN 1999:694715 HCAPLUS  
 DN 132:93556  
 TI Solid-Phase Oligosaccharide Synthesis: Preparation of Complex Structures Using a Novel Linker and Different Glycosylating Agents  
 AU Andrade, Rodrigo B.; Plante, Obadiah J.; Melean, Luis G.; Seeberger, Peter H.  
 CS Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA, 02139, USA  
 SO Org. Lett. (1999), 1(11), 1811-1814  
 CODEN: ORLEF7; ISSN: 1523-7060  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 132:93556  
 AB A .beta.-(1.fwdarw.4)-linked trisaccharide was prepd. in 53% yield on a polymer support using glycosyl phosphates and released by cross-metathesis of a novel linker to reveal the anomeric n-pentenyl glycoside. Heptasaccharide was prepd. in 9% yield in 14 steps.  
 IT 111-78-4, 1,5-Cyclooctadiene 627-42-9, 2-Chloroethyl methyl ether 129163-12-8 172222-30-9, Grubbs' ruthenium catalyst 253683-26-0 253683-40-8D, Merrifield resin bound 253683-41-9  
 RL: RCT (Reactant)  
 (solid phase oligosaccharide synthesis using a novel linker and different glycosylating agents)  
 RN 111-78-4 HCAPLUS  
 CN 1,5-Cyclooctadiene (6CI, 8CI, 9CI) (CA INDEX NAME)

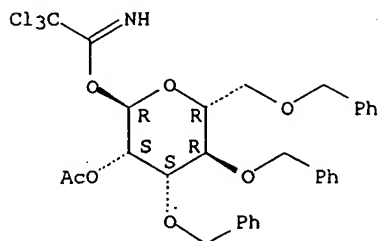


RN 627-42-9 HCAPLUS  
 CN Ethane, 1-chloro-2-methoxy- (9CI) (CA INDEX NAME)

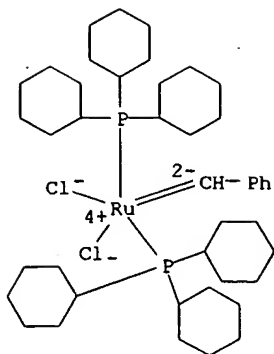


RN 129163-12-8 HCAPLUS  
 CN .alpha.-D-Mannopyranose, 3,4,6-tris-O-(phenylmethyl)-, 2-acetate 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



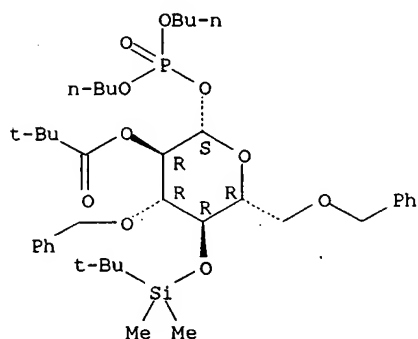
RN 172222-30-9 HCAPLUS  
 CN Ruthenium, dichloro(phenylmethylene)bis(tricyclohexylphosphine)-, (SP-5-31)- (9CI) (CA INDEX NAME)



RN 253683-26-0 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[(1,1-dimethylethyl)dimethylsilyl]-3,6-bis-O-(phenylmethyl)-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

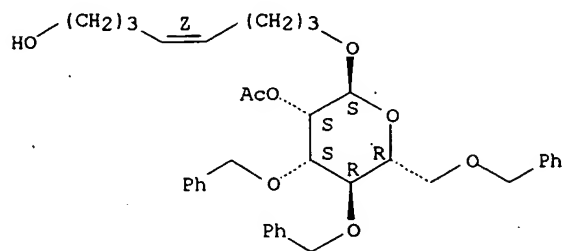
Absolute stereochemistry. Rotation (+).



RN 253683-40-8 HCAPLUS

CN .alpha.-D-Mannopyranoside, (4Z)-8-hydroxy-4-octenyl 3,4,6-tris-O-(phenylmethyl)-, 2-acetate (9CI) (CA INDEX NAME)

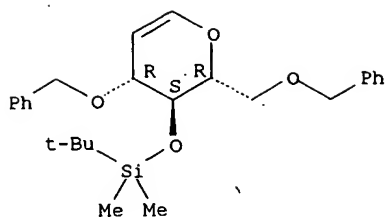
Absolute stereochemistry.  
Double bond geometry as shown.



RN 253683-41-9 HCAPLUS

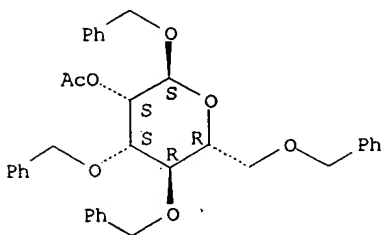
CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-4-O-[(1,1-dimethylethyl)dimethylsilyl]-3,6-bis-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



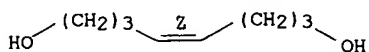
IT 61134-29-OP 62422-45-1DP, Merrifield resin bound  
 62422-45-1P 143706-45-OP 253683-23-7P  
 253683-24-8P 253683-25-9P 253683-27-1DP,  
 Merrifield resin bound 253683-28-2P 253683-39-5P  
 254442-15-4DP, Merrifield resin bound 254442-16-5DP,  
 Merrifield resin bound 254442-17-6DP, Merrifield resin bound  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (solid phase oligosaccharide synthesis using a novel linker and  
 different glycosylating agents)  
 RN 61134-29-0 HCAPLUS  
 CN .alpha.-D-Mannopyranoside, phenylmethyl 3,4,6-tris-O-(phenylmethyl)-,  
 acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



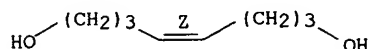
RN 62422-45-1 HCAPLUS  
 CN 4-Octene-1,8-diol, (4Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



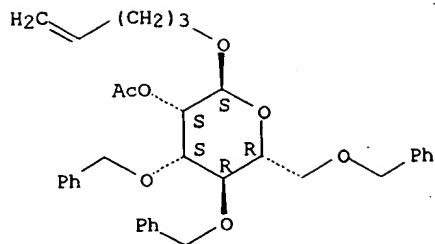
RN 62422-45-1 HCAPLUS  
 CN 4-Octene-1,8-diol, (4Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

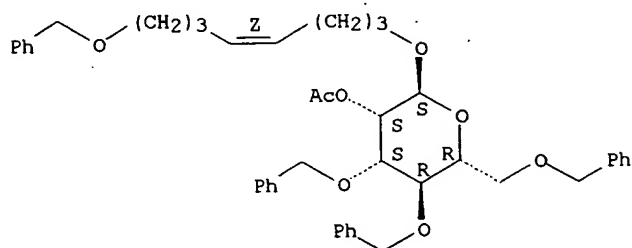


RN 143706-45-0 HCAPLUS  
 CN .alpha.-D-Mannopyranoside, 4-pentenyl 3,4,6-tris-O-(phenylmethyl)-,  
 acetate (9CI) (CA INDEX NAME)

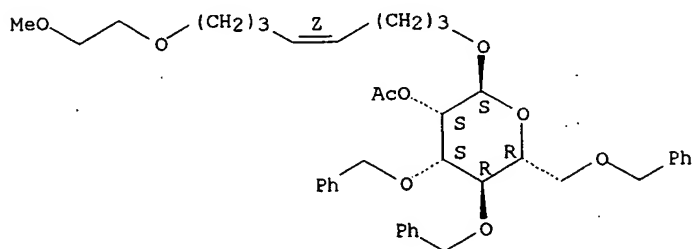
Absolute stereochemistry.



RN 253683-23-7 HCAPLUS

CN .alpha.-D-Mannopyranoside, (4Z)-8-(phenylmethoxy)-4-octenyl  
3,4,6-tris-O-(phenylmethyl)-, acetate (9CI) (CA INDEX NAME)Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.

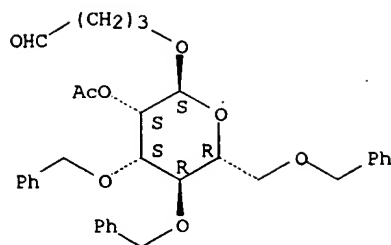
RN 253683-24-8 HCAPLUS

CN .alpha.-D-Mannopyranoside, (4Z)-8-(2-methoxyethoxy)-4-octenyl  
3,4,6-tris-O-(phenylmethyl)-, acetate (9CI) (CA INDEX NAME)Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.

RN 253683-25-9 HCAPLUS

CN Butanal, 4-[[2-O-acetyl-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl]oxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

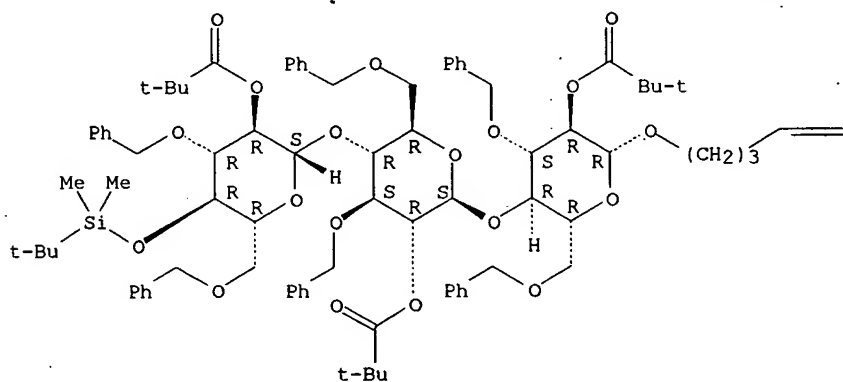


RN 253683-27-1 HCAPLUS

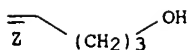
CN .beta.-D-Glucopyranoside, (4Z)-8-hydroxy-4-octenyl O-4-O-[(1,1-dimethylethyl)dimethylsilyl]-2-O-(2,2-dimethyl-1-oxopropyl)-3,6-bis-O-(phenylmethyl)-.beta.-D-glucopyranosyl-(1.fwdarw.4)-O-2-O-(2,2-dimethyl-1-oxopropyl)-3,6-bis-O-(phenylmethyl)-.beta.-D-glucopyranosyl-(1.fwdarw.4)-3,6-bis-O-(phenylmethyl)-, 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

PAGE 1-A



PAGE 1-B

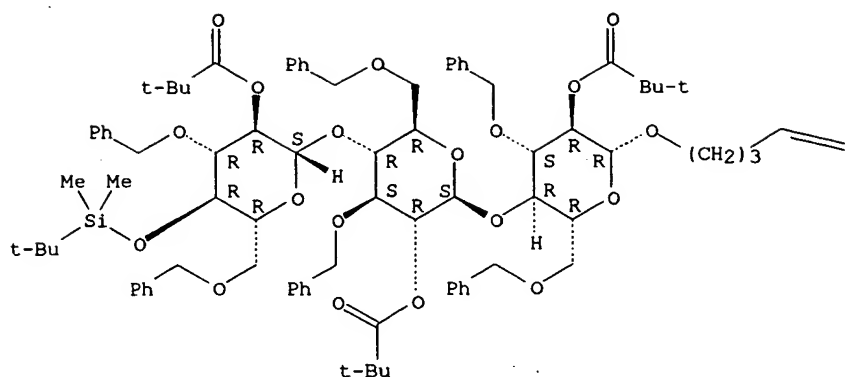


RN 253683-28-2 HCAPLUS

CN .beta.-D-Glucopyranoside, 4-pentenyl O-4-O-[(1,1-dimethylethyl)dimethylsilyl]-2-O-(2,2-dimethyl-1-oxopropyl)-3,6-bis-O-(phenylmethyl)-.beta.-D-glucopyranosyl-(1.fwdarw.4)-O-2-O-(2,2-dimethyl-1-oxopropyl)-3,6-bis-O-(phenylmethyl)-.beta.-D-glucopyranosyl-(1.fwdarw.4)-3,6-bis-O-(phenylmethyl)-, 2,2-dimethylpropanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

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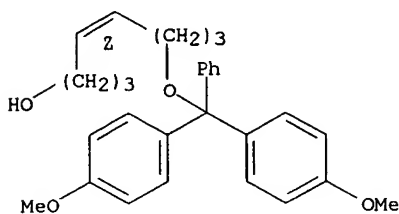


PAGE 1-B

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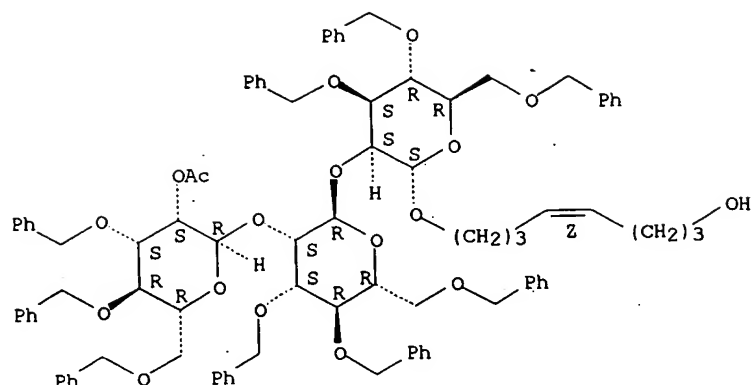
RN 253683-39-5 HCAPLUS  
 CN 4-Octen-1-ol, 8-[bis(4-methoxyphenyl)phenylmethoxy]-, (4Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 254442-15-4 HCAPLUS  
 CN .alpha.-D-Mannopyranoside, (4Z)-8-hydroxy-4-octenyl O-2-O-acetyl-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.

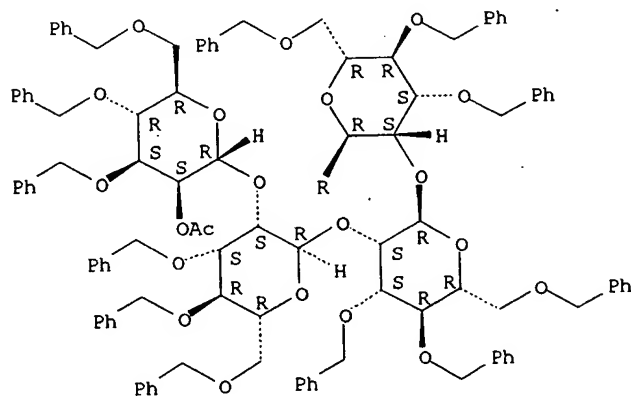


RN 254442-16-5 HCAPLUS

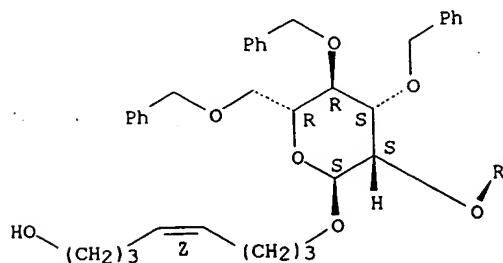
CN .alpha.-D-Mannopyranoside, (4Z)-8-hydroxy-4-octenyl O-2-O-acetyl-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

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RN 254442-17-6 HCAPLUS

CN .alpha.-D-Mannopyranoside, (4Z)-8-hydroxy-4-octenyl O-2-O-acetyl-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

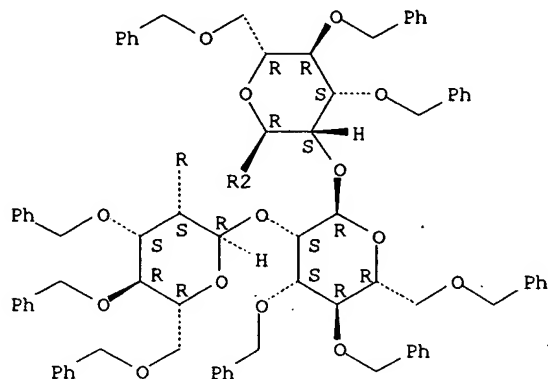
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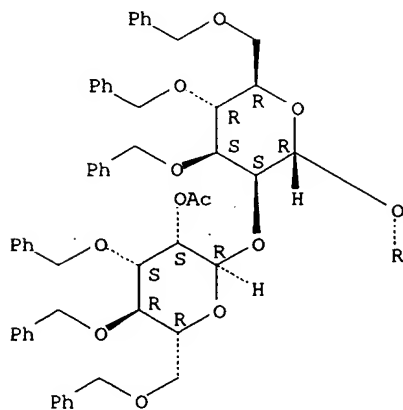
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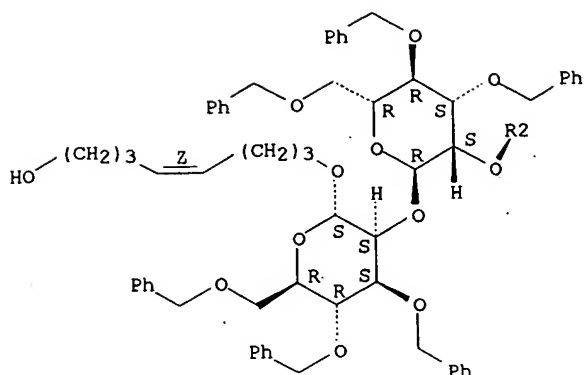
Absolute stereochemistry.  
Double bond geometry as shown.

PAGE 1-A



PAGE 2-A





IT 143706-52-9P 253683-29-3P 253683-35-1P  
253683-36-2P 253683-37-3P 253683-38-4P

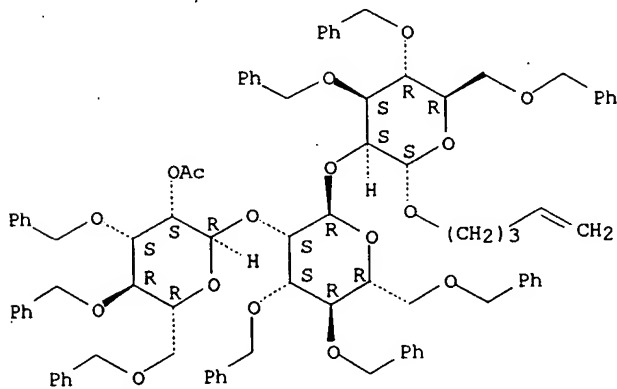
RL: SPN (Synthetic preparation); PREP (Preparation)

(solid phase oligosaccharide synthesis using a novel linker and different glycosylating agents)

RN 143706-52-9 HCAPLUS

CN .alpha.-D-Mannopyranoside, 4-pentenyl O-2-O-acetyl-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

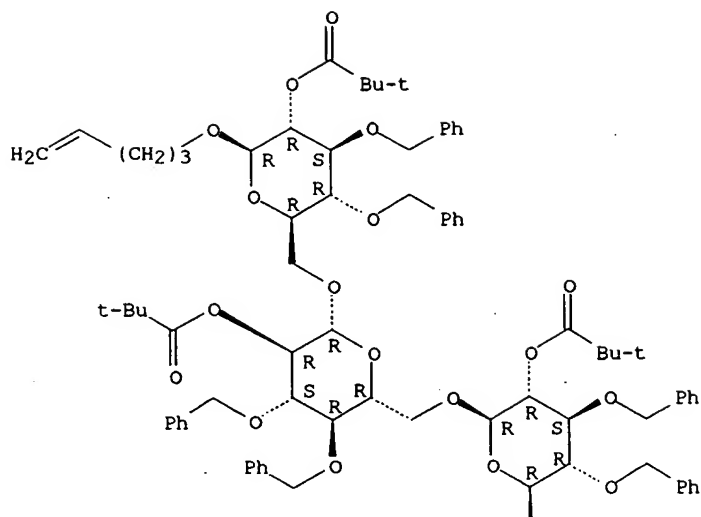


RN 253683-29-3 HCAPLUS

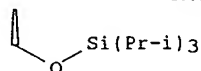
CN .beta.-D-Glucopyranoside, 4-pentenyl O-2-O-(2,2-dimethyl-1-oxopropyl)-3,4-bis-O-(phenylmethyl)-6-O-(tris(1-methylethyl)silyl)-.beta.-D-glucopyranosyl-(1.fwdarw.6)-O-2-O-(2,2-dimethyl-1-oxopropyl)-3,4-bis-O-(phenylmethyl)-.beta.-D-glucopyranosyl-(1.fwdarw.6)-3,4-bis-O-(phenylmethyl)-, 2,2-dimethylpropanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

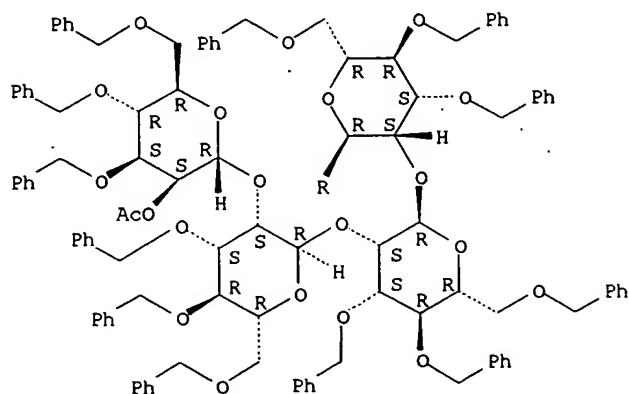


RN 253683-35-1 HCAPLUS

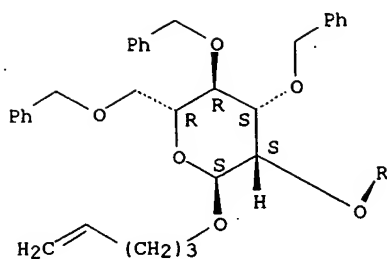
CN .alpha.-D-Mannopyranoside, 4-pentenyl O-2-O-acetyl-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



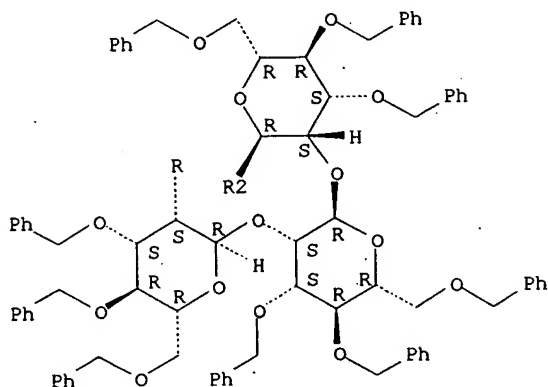
PAGE 2-A



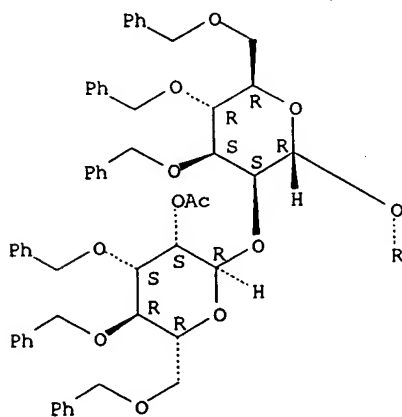
RN 253683-36-2 HCAPLUS  
 CN .alpha.-D-Mannopyranoside, 4-pentenyl O-2-O-acetyl-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)-.alpha.-D-mannopyranosyl-(1.fwdarw.2)-O-3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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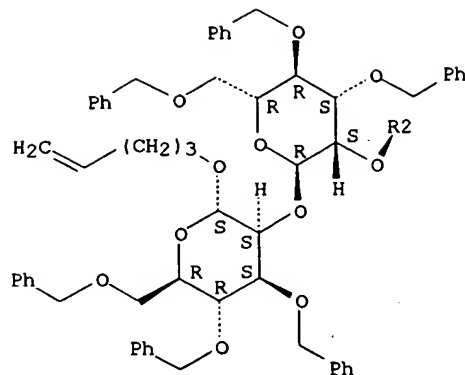


PAGE 2-A



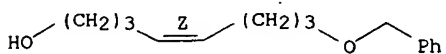
SEARCHED BY SUSAN HANLEY 305-4053

PAGE 3-A



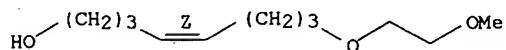
RN 253683-37-3 HCAPLUS  
 CN 4-Octen-1-ol, 8-(phenylmethoxy)-, (4Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 253683-38-4 HCAPLUS  
 CN 4-Octen-1-ol, 8-(2-methoxyethoxy)-, (4Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RE.CNT 50

RE

- (1) Adinolfi, M; Tetrahedron Lett 1996, V37, P5007 HCAPLUS
  - (2) Adinolfi, M; Tetrahedron Lett 1998, V39, P1953 HCAPLUS
  - (6) Caruthers, M; Science 1985, V230, P281 HCAPLUS
  - (7) Danishefsky, S; Science 1993, V260, P1307 HCAPLUS
  - (8) Douglas, S; J Am Chem Soc 1995, V117, P2116 HCAPLUS
- ALL CITATIONS AVAILABLE IN THE RE FORMAT

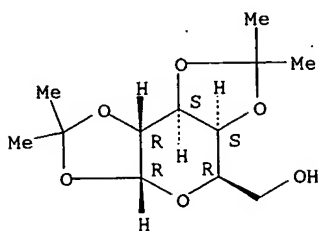
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L5 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2000 ACS  
 AN 1999:334357 HCAPLUS  
 DN 131:73867  
 TI Synthesis and Use of Glycosyl Phosphates as Glycosyl Donors  
 AU **Plante, Obadiah J.**; Andrade, Rodrigo B.; **Seeberger, Peter H.**  
 CS Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA, 02139, USA  
 SO Org. Lett. (1999), 1(2), 211-214  
 CODEN: ORLEF7; ISSN: 1523-7060  
 PB American Chemical Society  
 DT Journal  
 LA English  
 AB Differentially protected glycosyl phosphates prepd. by a straightforward synthesis from glycal precursors are used as powerful glycosyl donors. Activation of .beta.-glycosyl phosphates by TMSOTf at -78 .degree.C achieves the selective formation of .beta.-glycosidic linkages in excellent yields with complete stereoselectivity. Reaction with thiols results in the conversion of glycosyl phosphates into thioglycosides in nearly quant. yield. An orthogonal coupling strategy using glycosyl phosphate donors and thioethyl glycoside acceptors allows for the rapid synthesis of a trisaccharide.  
 IT 75-08-1, Ethanethiol 4064-06-6 40246-30-8  
 55628-54-1 80040-79-5 114117-12-3  
 145852-76-2 196703-95-4 226919-70-6  
 226919-85-3  
 RL: RCT (Reactant)  
 (prepn. and use of glycosyl phosphates as glycosyl donors)  
 RN 75-08-1 HCAPLUS  
 CN Ethanethiol (8CI, 9CI) (CA INDEX NAME)

H<sub>3</sub>C-CH<sub>2</sub>-SH

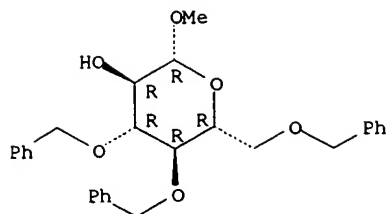
RN 4064-06-6 HCAPLUS  
 CN .alpha.-D-Galactopyranose, 1,2:3,4-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



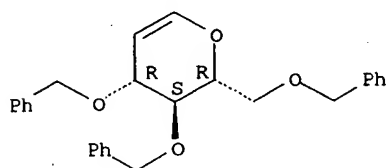
RN 40246-30-8 HCAPLUS  
 CN .beta.-D-Glucopyranoside, methyl 3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



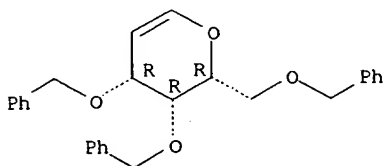
RN 55628-54-1 HCAPLUS  
 CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3,4,6-tris-O-(phenylmethyl)-  
 (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



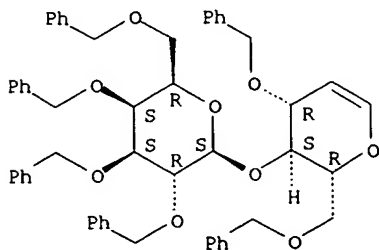
RN 80040-79-5 HCAPLUS  
 CN D-arabino-Hex-5-enitol, 2,6-anhydro-5-deoxy-1,3,4-tris-O-(phenylmethyl)-  
 (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



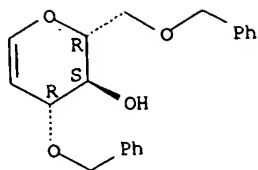
RN 114117-12-3 HCAPLUS  
 CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3,6-bis-O-(phenylmethyl)-4-O-  
 [2,3,4,6-tetrakis-O-(phenylmethyl)-.beta.-D-galactopyranosyl]- (9CI) (CA  
 INDEX NAME)

Absolute stereochemistry.



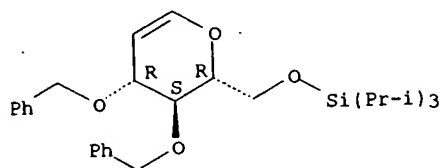
RN 145852-76-2 HCAPLUS  
 CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3,6-bis-O-(phenylmethyl)-  
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.



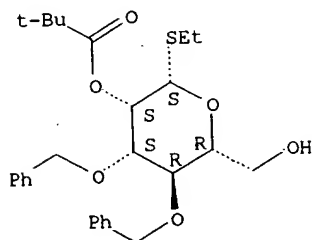
RN 196703-95-4 HCAPLUS  
 CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-3,4-bis-O-(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



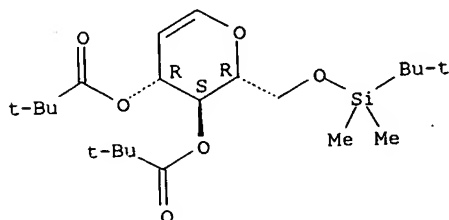
RN 226919-70-6 HCAPLUS  
 CN .beta.-D-Mannopyranoside, ethyl 3,4-bis-O-(phenylmethyl)-1-thio-, 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 226919-85-3 HCAPLUS  
 CN D-arabino-Hex-1-enitol, 1,5-anhydro-2-deoxy-6-O-[(1,1-dimethylethyl)dimethylsilyl]-, bis(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



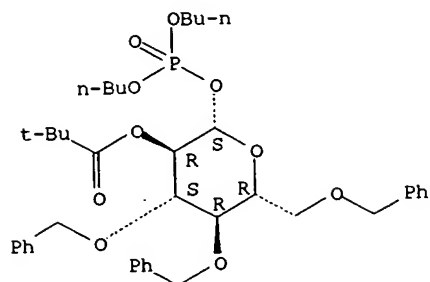
IT 226919-63-7P 226919-66-0P 226919-69-3P  
 226919-73-9P 226919-79-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and use of glycosyl phosphates as glycosyl donors)

RN 226919-63-7 HCAPLUS  
 CN .beta.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

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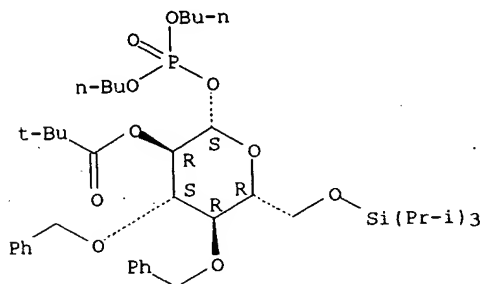
Absolute stereochemistry. Rotation (-).



RN 226919-66-0 HCAPLUS

CN .beta.-D-Glucopyranose, 3,4-bis-O-(phenylmethyl)-6-O-[tris(1-methylethyl)silyl]-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

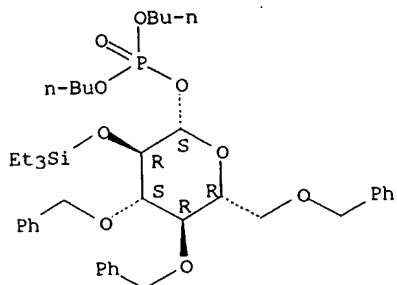
Absolute stereochemistry. Rotation (-).



RN 226919-69-3 HCAPLUS

CN .beta.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-2-O-(triethylsilyl)-, dibutyl phosphate (9CI) (CA INDEX NAME)

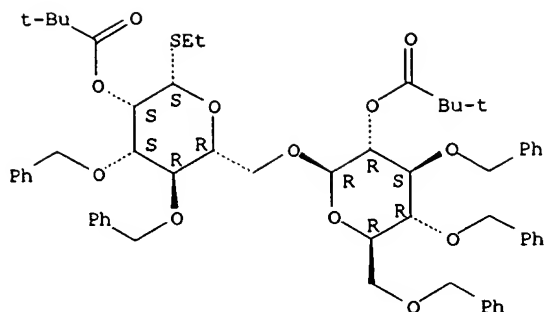
Absolute stereochemistry. Rotation (-).



RN 226919-73-9 HCAPLUS

CN .beta.-D-Mannopyranoside, ethyl 6-O-[2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl]-3,4-bis-O-(phenylmethyl)-1-thio-, 2,2-dimethylpropanoate (9CI) (CA INDEX NAME)

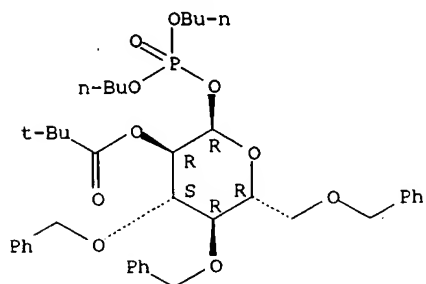
Absolute stereochemistry. Rotation (-).



RN 226919-79-5 HCAPLUS

CN .alpha.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 40246-33-1P 201210-64-2P 219122-26-6P

226919-62-6P 226919-64-8P 226919-65-9P

226919-67-1P 226919-68-2P 226919-71-7P

226919-72-8P 226919-76-2P 226919-78-4P

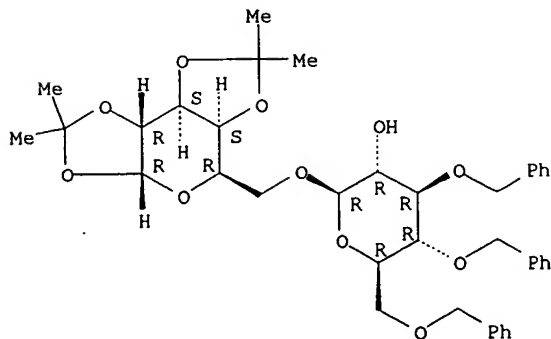
226919-81-9P 226919-83-1P 226919-84-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and use of glycosyl phosphates as glycosyl donors)

RN 40246-33-1 HCAPLUS

CN .alpha.-D-Galactopyranose, 1,2:3,4-bis-O-(1-methylethylidene)-6-O-[3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

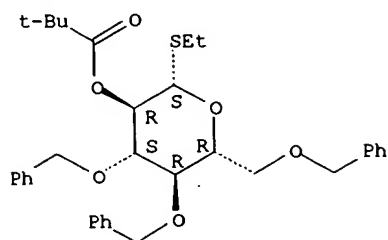


RN 201210-64-2 HCAPLUS

CN .beta.-D-Glucopyranoside, ethyl 3,4,6-tris-O-(phenylmethyl)-1-thio-, 2,2-dimethylpropanoate (9CI) (CA INDEX NAME)

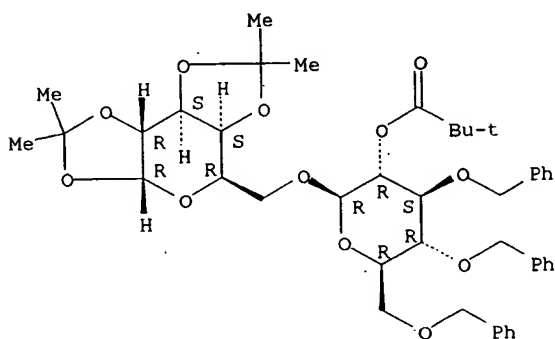
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Absolute stereochemistry.



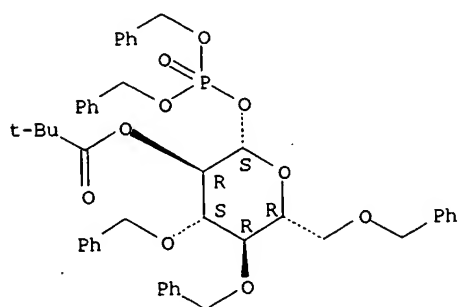
RN 219122-26-6 HCAPLUS  
 CN .alpha.-D-Galactopyranose, 6-O-[2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)-.beta.-D-glucopyranosyl]-1,2:3,4-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 226919-62-6 HCAPLUS  
 CN .beta.-D-Glucopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-[bis(phenylmethyl)phosphate] 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 226919-64-8 HCAPLUS  
 CN .beta.-D-Galactopyranose, 3,4,6-tris-O-(phenylmethyl)-, 1-(dibutyl phosphate) 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).